

REMARKS

Reexamination of the above-identified application is respectfully requested.

The Office Action

The title is objected to for not being descriptive. Applicants have proposed a new title. LOW PRESSURE DISCHARGE LAMP WITH ENVELOPE HAVING DOUBLE HELIX SHAPE AND SEALED ENDS, which is supported by claim 1 of the application as filed.

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Soules, et al. (U.S. Patent No. 5,705,883), in view of Bouwknecht, et al. (U.S. Patent No. 4,374,340).

The References of Record

Soules, et al. discloses a fluorescent lamp having a single discharge tube **20** with first and second ends **22, 24**. A phosphor coating **42** is provided on the internal wall of the discharge tube.

Bouwknecht, et al. discloses a low pressure mercury discharge lamp having a discharge vessel comprising a plurality of tubular portions **1, 2** which are interconnected in series by a coupling link **7**.

The Claims Distinguish over the References of Record

Claim 1 recites a low pressure discharge lamp having a double helix shape comprising a lamp base and an envelope including discharge tube sections wound helically about a longitudinal axis and fitted into each other as a double-start thread. Second end portions of the discharge tube are farther off the lamp base and each have a gas-tight sealing. The second end portions are bent inwardly from a pitch of the helix and extend next to each other spaced apart by a clearance. A passage is formed between the second end portions and spaced apart by a distance from the sealing of each the second end portions.

The Soules patent discloses a discharge tube with only one section which is shaped as a double helix. The Examiner suggests that the tubes are bent inward from a pitch of the helix. However, it is the ends **22, 24** which are bent radially inward (col. 4, lines 24-27). There are no **second** end portions bent inwardly from a pitch of the helix.

Further, there is no motivation in either reference for providing a passage between two helical portions. The continuous helix of Soules is said to address heat transfer considerations by providing a continuous helix. There is thus no motivation for using two separate helical portions or two straight portions, as disclosed by **Bouwknegt, et al.**

Accordingly, it is submitted that claim 1 and claims 2, 3, and 5-9 dependent therefrom, distinguish patentably and unobviously over the references of record.

Claim 4 has been placed in independent form as a method claim. Neither of the references of record suggests forming a passage by blow molding. Accordingly, it is submitted that claim 4 distinguishes patentably and unobviously over the references of record.

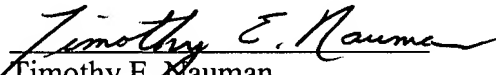
Accordingly, it is submitted that claims 1-9 are now in condition for allowance.

CONCLUSION

For the reasons set forth above, it is submitted that claims 1-9 distinguish patentably over the reference of record. An early allowance of these claims is earnestly solicited.

Respectfully submitted,

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